



DEPARTMENT OF THE INTERIOR

Fish and Wildlife Service

50 CFR Part 17

[Docket No. FWS–R4–ES–2013–0033]

[4500030113]

RIN 1018–AZ15

Endangered and Threatened Wildlife and Plants; Endangered Species Status for *Brickellia mosieri* (Florida Brickell-bush) and *Linum carteri* var. *carteri* (Carter’s Small-flowered Flax)

AGENCY: Fish and Wildlife Service, Interior.

ACTION: Final rule.

SUMMARY: We, the U.S. Fish and Wildlife Service (Service), determine endangered species status under the Endangered Species Act of 1973 (Act), as amended, for *Brickellia mosieri* (Florida brickell-bush) and *Linum carteri* var. *carteri* (Carter’s small-

flowered flax), two plants from Miami-Dade County, Florida. The effect of this regulation will be to add these plants to the List of Endangered and Threatened Plants.

DATES: This rule becomes effective [**INSERT DATE 30 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER**].

ADDRESSES: This final rule is available on the internet at <http://www.regulations.gov> and at <http://www.fws.gov/verobeach/>. Comments and materials we received, as well as supporting documentation we used in preparing this rule, are available for public inspection at <http://www.regulations.gov>. All of the comments, materials, and documentation that we considered in this rulemaking are available by appointment, during normal business hours at: U.S. Fish and Wildlife Service, South Florida Ecological Services Office, 1339 20th Street, Vero Beach, FL 32960; telephone 772–562–3909; facsimile 772–562–4288.

FOR FURTHER INFORMATION CONTACT: Craig Aubrey, Field Supervisor, U.S. Fish and Wildlife Service, South Florida Ecological Services Office, 1339 20th Street, Vero Beach, FL 32960, by telephone 772–562–3909, or by facsimile 772–562–4288. Persons who use a telecommunications device for the deaf (TDD) may call the Federal Information Relay Service (FIRS) at 800–877–8339.

SUPPLEMENTARY INFORMATION:

Executive Summary

Why we need to publish a rule. Under the Act, a species may warrant protection through listing if we find that it is an endangered or threatened species throughout all or a significant portion of its range. Listing a species as endangered or threatened can only be completed by issuing a rule. We will also be finalizing the designation of critical habitat for *Brickellia mosieri* and *Linum carteri* var. *carteri* under the Act in the near future.

This rule will finalize the listing of *Brickellia mosieri* and *Linum carteri* var. *carteri* as endangered species.

The basis for our action. Under the Act, we may determine that a species is an endangered or threatened species based on any of five factors: (A) The present or threatened destruction, modification, or curtailment of its habitat or range; (B) overutilization for commercial, recreational, scientific, or educational purposes; (C) disease or predation; (D) the inadequacy of existing regulatory mechanisms; or (E) other natural or manmade factors affecting its continued existence. We have determined that *Brickellia mosieri* and *Linum carteri* var. *carteri* meet the definition of an endangered species based on Factors A, D, and E.

Peer review and public comment. We sought comments from six independent specialists to ensure that our action is based on scientifically sound data, assumptions, and analyses. We invited these peer reviewers to comment on our listing proposal. We also considered

all other comments and information received during the comment period.

Previous Federal Action

Please refer to the proposed listing rule for *Brickellia mosieri* and *Linum carteri* var. *carteri* (78 FR 61273; October 3, 2013) for a detailed description of previous Federal actions concerning these plants.

Summary of Comments and Recommendations

In the proposed rule published on October 2, 2013 (78 FR 61273), we requested that all interested parties submit written comments on the proposal by December 2, 2013. We also contacted appropriate Federal and State agencies, scientific experts and organizations, and other interested parties and invited them to comment on the proposal. Newspaper notices inviting general public comment were published in the Miami Herald.

Peer Reviewer Comments

In accordance with our peer review policy published on July 1, 1994 (59 FR 34270), we solicited expert opinion from six knowledgeable individuals with scientific expertise that included familiarity with *Brickellia mosieri* and *Linum carteri* var. *carteri* and/or their habitat, biological needs, and threats; the geographical region of South

Florida in which these plants occur; and conservation biology principles. We received responses from all six of the peer reviewers we contacted.

We reviewed all comments received from the peer reviewers for substantive issues and new information regarding the listing of *Brickellia mosieri* and *Linum carteri* var. *carteri*. The peer reviewers generally concurred with our methods and conclusions, and provided additional information, clarifications, and suggestions to improve the final listing rule. Peer reviewer comments are addressed in the following summary and incorporated into the final rule as appropriate.

(1) Comment: One peer reviewer commented on the lack of discussion related to the threat of herbivory from invertebrates, both native and nonnative, and noted that *Brickellia cordifolia*, a north Florida species, experiences considerable damage on an annual basis from a not-yet-identified, leaf-boring-type arthropod. The reviewer also noted the possible threat of unnaturally high herbivory from deer, rabbits, and other vertebrates, as well as threats associated with feral hogs, both of which he stated are threats throughout most of Florida.

Our Response: We appreciate the information provided; however, biologists monitoring *Brickellia mosieri* in Miami-Dade County have not observed any significant damage to the species from invertebrates or vertebrates, native or nonnative. In addition, another peer reviewer noted that deer no longer occur in the areas where these plants exist, and rabbits occur only sparingly, and not in all areas. Based on the information

available at this time, the Service does believe that predation poses a threat to *Brickellia mosieri*.

(2) *Comment:* One peer reviewer noted that two specimens of *Brickellia mosieri* (filed as *B. eupatorioides* and annotated by K.A. Bradley as *B. eupatorioides* var. *floridana*) in the collection at the Fairchild Tropical Botanic Garden Herbarium indicate that the historical range of this species probably extended north of South Miami. Based on these specimens, the reviewer stated that the historical range is better characterized as extending from approximately Coconut Grove to Florida City, while allowing that these observations may have been included with those described as not giving accurate or precise location information under “Historical Range” in the proposed rule.

Our Response: We appreciate the information provided. The Service was aware of one of these samples (by Buswell in 1947 from a pineland south of Coral Gables), which was referenced by Bradley and Gann (1999, p. 16), and incorporated into their approximation of historical range (South Miami is less than 3.2 km (2.0 mi) southwest of Coral Cables). However, we were not aware of the second sample (by Small in 1912 from pinelands near Coconut Grove). Based on this new information, we agree that the northern extent of the historical range is more appropriately characterized as Coconut Grove. We have incorporated the revised text and related changes (i.e., calculations of range contraction) in the **Background** and **Determination** sections in this final rule.

Comment: One peer reviewer noted that an understanding of these plants' reproductive biology, especially their floral biology, pollination, and breeding systems, is especially critical to helping them recover more robust numbers. A second peer reviewer had a similar comment regarding the need for additional study related to seed dispersal, pollinator mechanisms, and augmentation and reintroduction studies. The first reviewer noted that the effects of habitat conditions on the reproductive allocation of both plants has not yet been quantified, and that individuals in smaller, more isolated, and/or degraded pine rockland habitat fragments have lower reproductive rates than counterparts in larger, more well-maintained pine rockland sites, leading to the likely loss of genetic diversity represented in those low-quality sites over time.

Our Response: We agree and had incorporated similar statements in our discussion of Habitat Fragmentation and Effects of Small Population Size and Isolation (under Factors A and E, respectively, in the **Summary of Factors Affecting the Species** section) in the proposed listing rule.

(4) Comment: One peer reviewer requested further identification of the area identified as "Rockdale Pineland Addition" in Table 2 of the proposed rule (78 FR 61273; October 3, 2013).

Our Response: According to the Florida Natural Area Inventory's (FNAI) Florida Conservation Lands data layer (September 2013 version), the area known as Rockdale Pineland consists of two parcels: Rockdale Pineland (approximately 26 acres, owned by

the State of Florida and managed by Miami-Dade County), and the Rockdale Pineland Addition (approximately 21 acres, owned and managed by Miami-Dade County). Rockdale Pineland Addition surrounds Rockdale Pineland, like a buffer. The *Linum carteri* var. *carteri* occurrence is within this “buffer,” along the edges of the abandoned FEC Railroad tracks, adjacent to pine rockland habitat.

(5) *Comment:* One peer reviewer noted an apparent discrepancy between the occupancy of *Brickellia mosieri* on Federal lands (U.S. Coast Guard (USCG) and National Oceanic Atmospheric Association (NOAA) lands in the Richmond Pinelands), as described in Table 1 and in the Federal section under the discussion of Factor D, *The Inadequacy of Existing Regulatory Mechanisms*, in the proposed rule (78 FR 61273; October 3, 2013).

Our Response: The discrepancy was related to the difference between how *Brickellia mosieri* occurrences were reported in Table 1 (i.e., specific to managed area and owner) versus how we evaluated whether an area was considered occupied (i.e., described at the habitat patch level). We considered contiguous pine rockland habitat to be the same habitat patch, regardless of where ownership boundaries were located within it. A habitat patch was considered occupied if the species occurs within its boundaries, although the species may not have been observed throughout the entire patch. Thus, NOAA and some USCG lands are considered occupied by *Brickellia mosieri* because an extant population occurs within the same habitat patches (Martinez Pineland and University of Miami, respectively). That said, we have revised the language in the

discussion of Federal regulations under Factor D in the **Summary of Factors Affecting the Species** section to explain this distinction.

(6) *Comment:* One peer reviewer noted that *Lygodium microphyllum* (Old World climbing fern) is not likely a threat to *Brickellia mosieri* and *Linum carteri* var. *carteri* as it primarily occupies wetland habitats, and is not known to invade pine rockland habitat.

Our Response: We agree and have removed this language from our discussion of nonnative plants under Factor E in the **Summary of Factors Affecting the Species** section.

(7) *Comment:* One peer reviewer stated that the U.S. General Services Administration property within the Richmond Pinelands Complex should be more thoroughly surveyed for both plants, especially *Brickellia mosieri*.

Our Response: The lands referenced are now owned by the U.S. Army Corps of Engineers. However, we agree with the peer reviewer and would encourage and support such a survey being conducted. The Richmond Pinelands Complex represents the largest remaining group of contiguous fragments of pine rockland habitat outside of Everglades National Park (ENP), and the Service hopes to cooperatively engage all landowners, including Federal agencies, to survey, manage, and conserve this area.

(8) *Comment:* One peer reviewer specifically supported our rationale for the

proposed listing determination, which focused on a more qualitative assessment of threats, rather than some form of population viability analysis, due to limited data available, especially in relation to population response to stochastic events and long-term disturbances. The reviewer also noted that guidelines developed for medium-to-large size animals do not work well for herbaceous plants, which could have 1,000 individuals concentrated in a single site, making the species vulnerable to a single event of human or natural origin.

Our Response: We agree, and thank the reviewer for this comment.

Comments from States

The two plants occur only in Florida. We received no comments from the State of Florida regarding the listing proposal. We note, however, that one peer reviewer was from the Florida Forest Service, Florida Department of Agriculture and Consumer Services; those comments are addressed above.

Public Comments

During the first comment period, we received two public comment letters directly addressing the proposed listing. Both commenters suggested technical corrections to sections of the proposed rule pertaining to the **Background** and **Summary of Factors Affecting the Species**, related to scientific names, species biology, and citations, to

include additional information and correct minor errors. We did not receive any requests for a public hearing, nor did we receive any comments on the listing rule during the second comment period. The comments are appreciated and have been incorporated into the appropriate sections of the final rule. The remaining comments we received are grouped below into two general issues.

Issue 1: Habitat

(9) Comment: One commenter noted that the sandhill community does not occur in Miami-Dade County (per FNAI 2010), and suggests that mesic flatwoods would be a more appropriate description of an intergrade community with pine rocklands on the northern Miami Rock Ridge.

Our Response: We thank the reviewer for this comment, and acknowledge that there is an apparent discrepancy between the described pine rockland–sandhill community association on the northern Miami Rock Ridge (per Snyder et al. 1990, p. 257, as well as FNAI 2010, p. 63) and the described extent of sandhill within Florida (does not extend into Miami-Dade County; FNAI 2010, p. 40). Based on review of the FNAI community descriptions, we agree that the classification of mesic flatwoods most accurately describes the community into which pine rockland merges in northern Miami-Dade County, and have incorporated this information in the **Background** section.

(10) Comment: One commenter noted that, in our discussion of natural

forest communities (NFCs) in Miami-Dade County (in the Local section under the discussion of Factor D, *The Inadequacy of Existing Regulatory Mechanisms* of the proposed rule (78 FR 61273; October 3, 2013)), tropical hardwood hammocks include rockland hammocks.

Our Response: We agree. In this instance, we used the term “tropical hardwood hammock” in keeping with the terminology used on Miami-Dade County environmental websites to describe this type of habitat within NFCs and Environmentally Endangered Lands. Because of this, and because pine rocklands are the focus of the discussion, we believe it is suitable to retain the existing wording in this section.

Issue 2: Threats

(11) Comment: One commenter stated that Pine Shore Pineland Preserve burned in a wildfire on April 8, 2013, resulting in improved habitat conditions. Because of this, and in relation to this commenter’s previous cited personal communication (in the proposed rule (78 FR 61273; October 3, 2013)), the commenter believes that this population of *Brickellia mosieri* is no longer the most endangered.

Our Response: We appreciate the information provided and have removed the subject sentence related to the habitat condition and status of *Brickellia mosieri* on Pine Shore Pineland Preserve from the **Summary of Factors Affecting the Species** section.

(12) *Comment:* One commenter indicated that the threat of mountain biking at R. Hardy Matheson Preserve has been mitigated (as opposed to remedied, as stated in the proposed rule (78 FR 61273; October 3, 2013)) by the installation of fencing. This commenter also stated that habitat succession has increased since mountain bikers have been fenced out, which has not benefited habitat for *Linum carteri* var. *carteri*.

Our Response: We appreciate the information provided and have incorporated it into the **Summary of Factors Affecting the Species** section.

Summary of Changes from the Proposed Rule

Based on information we received in peer review and public comments, we made the following changes:

In the **Background** section:

(1) We made the following five changes to scientific names: revised the names of three plants to reflect the accepted taxonomy per the Integrated Taxonomic Information System (ITIS), added a subspecies designation and corrected the common name of one plant to represent the intended pine rockland subspecies, and deleted one plant from the vegetation list to prevent potential taxonomic confusion.

(2) We corrected one citation (Bradley and Gann 1999), which was missing a digit in the year.

(3) We revised the description of pine rockland’s natural community associations on the northern Miami Rock Ridge, changing the association with sandhill to an association with mesic flatwoods.

(4) We revised the historical range of *Brickellia mosieri*, extending the northern extent from “South Miami” to “approximately Coconut Grove”, to reflect new information regarding herbarium samples. Related to this change, we revised our calculations of the contraction of historical range, from more than 13 percent to more than 30 percent.

(5) We included additional information on the flowering response of *Brickellia mosieri* to fire.

In the **Summary of Factors Affecting the Species** section:

(6) We deleted a sentence related to the habitat condition and status of *Brickellia mosieri* on Pine Shore Pineland Preserve, as it was no longer applicable.

(7) We revised wording related to the occurrence of *Brickellia mosieri* in the Richmond Pinelands and specifically on lands managed by USCG and NOAA.

(8) We made the following changes to two scientific names: revised the name of one plant to reflect the accepted taxonomy per ITIS, and changed the name of one plant in two places to correct a typographical error.

(9) We removed a sentence referencing the potential future threat of *Lygodium microphyllum*, since this plant is unlikely to pose a threat to pine rockland species due to its strong association with wetter habitats.

(10) We revised and included additional information on the threat of mountain biking and habitat conditions at R. Hardy Matheson Preserve.

(11) We revised a sentence regarding IRC’s *Brickellia mosieri* reintroduction site, replacing “George and Avery Pineland” with “one private site.”

Background

Brickellia mosieri

Please refer to the proposed listing rule (78 FR 61273; October 3, 2013) for the description of *Brickellia mosieri*, its taxonomy, and its suitable climate. Below we present updated summaries of information in the proposed rule, and new information based on peer review and public comment, related to its habitat, historical and current range, population estimates, demographics, reproduction, and genetics.

Habitat

Brickellia mosieri grows exclusively in pine rocklands on the Miami Rock Ridge in Miami-Dade County outside the boundaries of ENP. This area extends from the ENP boundary, near the park entrance road, northeast approximately 72 kilometers (km) (45 miles (mi)) to the ridge’s end near North Miami. Habitat conditions more specific to this area are highlighted below. The pine rocklands are a unique ecosystem found on limestone substrates in three areas in Florida—the Miami Rock Ridge, in the Florida

Keys, and in the Big Cypress Swamp. The pine rocklands differ to some degree between and within these areas with regard to substrate (e.g., amount of exposed limestone, type of soil), elevation, hydrology, and species composition (both plant and animal). The substrate, elevation, and hydrology of pine rocklands on the Miami Rock Ridge outside of ENP are discussed in detail in the proposed listing rule for *B. mosieri* and *Linum carteri* var. *carteri* (78 FR 61273; October 3, 2013), while the species composition of this area is discussed below.

Pine rockland is characterized by an open canopy of South Florida slash pine (*Pinus elliottii* var. *densa*). Subcanopy development is rare in well-maintained pine rocklands, with only occasional hardwoods, such as *Lysiloma latisiliquum* (wild tamarind) and *Quercus virginiana* (live oak) growing to tree size in Miami Rock Ridge pinelands (Snyder *et al.* 1990, p. 253). The shrub/understory layer is a diverse mix of species including both temperate and tropical shrubs and palms. Dominant plants in the shrub layer of pine rocklands vary based on elevation, substrate, and nearby associated natural communities. The pine rocklands where *Brickellia mosieri* occurs are characterized by an open shrub canopy of *Serenoa repens* (saw palmetto), *Myrica cerifera* (wax myrtle), *Metopium toxiferum* (poisonwood), and *Sideroxylon salicifolium* (willow bustic) as well as species with more restricted distribution within pine rocklands including *Sideroxylon reclinatum* ssp. *austrofloridense* (Everglades bully), *Callicarpa americana* (beauty berry), *Dodonaea angustifolia* (varnish leaf), and *Ilex cassine* (dahoon holly) (Snyder *et al.* 1990, p. 254; Bradley and Gann 1999, p. 12). The shrub layer in pinelands occurring in the northern end of the Miami Rock Ridge more closely resembles

pine flatwoods as a result of the amount of sandy soils in this area, with species such as *Lyonia fruticosa* (staggerbush), *Quercus minima* (dwarf live oak), *Quercus pumila* (running oak), and *Vaccinium myrsinites* (shiny blueberry) becoming more common (Snyder *et al.* 1990, p. 255). The height and density of the shrub layer vary based on fire frequency, with understory plants growing taller and more dense as time since fire increases.

Pine rocklands in all three areas of Florida contain a richly diverse herbaceous layer, including a large number of rare and endemic species, such as *Brickellia mosieri*. The diversity of the herbaceous layer decreases as the density of the shrub layer increases (i.e., as understory openness decreases), and pine rockland on the mainland has a more diverse herbaceous layer, due to the presence of temperate species and some tropical species that do not occur in the Florida Keys (FNAI 2010, p. 63). The herbaceous layer can range from mostly continuous in areas with more soil development and little exposed limestone, to sparse where much of the limestone is at the surface. Most herbaceous species in pine rocklands are perennials (Snyder *et al.* 1990, p. 257). Common herbaceous associates of *B. mosieri* in the Miami Rock Ridge pine rocklands include *Schizachyrium sanguineum* (crimson bluestem), *Schizachyrium gracile* (wire bluestem), *Symphyotrichum adnatum* (scaleleaf aster), and *Acalypha chamaedrifolia* (bastard copperleaf) (Bradley and Gann 1999, p. 12). *B. mosieri* may also be found in close association with several other rare plants, including *Chamaesyce deltoidea* ssp. *deltoidea* (deltoid spurge), *Chamaesyce deltoidea* ssp. *adhaerens* (wedge sandmat), *Chamaesyce deltoidea* ssp. *pinetorum* (pineland sandmat), *Galactia smallii* (Small's milkpea),

Polygala smallii (tiny polygala), and *Argythamnia blodgettii* (Blodgett's silverbush) (Bradley and Gann 1999, p. 12).

Pine rockland occurs in a mosaic with primarily two other natural community types—rockland hammock and marl prairie. Pine rockland grades into rockland hammock; pine rockland has an open pine canopy, and rockland hammock has a closed, hardwood canopy. Pine rockland is a fire-maintained ecosystem—a well-maintained pine rockland is a savanna-like forest, but, in the absence of fire, it will eventually succeed into rockland hammock. The functional relationship and response of pine rocklands and *Brickellia mosieri* to fire and other natural disturbances are discussed in detail in the proposed listing rule for *B. mosieri* and *Linum carteri* var. *carteri* (78 FR 61273; October 3, 2013).

Pine rockland on the Miami Rock Ridge can also occur within lower, seasonally flooded marl prairies, which differ from pine rockland in having no pines, an understory dominated by grasses and sedges, and a minimal cover of shrubs (FNAI 2010, p. 63). Where pine rockland occurs close to the ocean, it may be bordered by mangrove swamp or salt marsh and can receive flooding by extremely high tides (FNAI 2010, p. 63). Pine rocklands on the northern Miami Rock Ridge grade into scrub and mesic flatwoods vegetation where the three communities intermix in areas with deep sands and rock outcrops (Snyder *et al.* 1990, p. 257; Gann 2014, pers. comm.).

Historical Range

Brickellia mosieri is endemic to the pine rocklands of the Miami Rock Ridge in Miami-Dade County. It was historically known from central and southern Miami-Dade County from approximately Coconut Grove to Florida City, a range of approximately 45.0 km (28.0 mi), along the Miami Rock Ridge (based on data in Bradley and Gann 1999, p. 11, and Fairchild Tropical Botanic Garden Virtual Herbarium 2014, page numbers not applicable). However, Bradley and Gann (1999, p. 11) state that herbarium specimens have not been studied from the New York Botanical Garden, so the full extent of its historical range is unknown. Some available herbarium specimens and other records for this plant (Bradley and Gann 1999, p. 16; Wunderlin and Hansen 2008, page numbers not applicable) do not give precise or accurate location information.

Current Range, Population Estimates, and Status

Brickellia mosieri is currently distributed from central and southern Miami-Dade County from SW 120 St. (latitude ca. 25 degrees (°) 39.4 minutes (')N) to Florida City (latitude ca. 25° 26.0'N) (Bradley and Gann 1999, p. 11), suggesting its historical range has contracted at least 13.6 km (8.5 mi), or more than 30 percent. A detailed account of *B. mosieri* occurrences and population status were provided in the proposed listing rule (78 FR 61273) published in the **Federal Register** on October 2, 2013.

Demographic, Reproductive Biology, and Population Genetics

Little research has been done into the demography, reproductive biology, or genetics of *Brickellia mosieri*. Field observations indicate that the species does not usually occur in great abundance—populations are typically sparse and contain a low density of plants even in well-maintained pine rockland habitat (Bradley and Gann 1999, p. 12). Reproduction is sexual (Bradley and Gann 1999, p. 12). While specific pollinators or dispersers are unknown, flower morphology suggests this species may be pollinated by butterflies, bees, or both (Koptur 2013, pers. comm.); wind is one likely dispersal vector (Gann 2013b, pers. comm.). Flowering takes place primarily in the fall (August–October) (Bradley and Gann 1999, p. 12). Off-season flowering is usually the result of fire, and *B. mosieri* will flower within 1 to 2 months following a fire, regardless of the time of year (Possley 2013 pers. comm.).

Linum carteri var. *carteri*

Please refer to the proposed listing rule (78 FR 61273; October 3, 2013) for a detailed discussion of *Linum carteri* var. *carteri*'s taxonomy, suitable climate, habitat, historical and current range, population estimates, demographics, reproduction, and genetics. Below we provide an updated summary of information in the proposed rule, and new information based on peer review and public comment, related to the description of the plant.

Description

Linum carteri var. *carteri* (Family: Linaceae) is an annual or short-lived perennial herb endemic to Miami-Dade County, where it grows in pine rocklands, particularly in disturbed pine rocklands (Bradley and Gann 1999, p. 70). Its stem is erect, 230–360 millimeters (mm) (9.0–14.2 inches (in)) tall, commonly branched near the base, and puberulent (covered with minute hairs). Its leaves are slender (18–26 mm (0.7–1.0 in) long and 0.8–1.2 mm (0.03–0.05 in) wide), entire, alternate, and closely overlap at the base of the plant. This variety has stipules (pair of appendages at the base of the petiole, which is the stalk by which a leaf is attached to a stem) with paired dark glands. Its inflorescence (cluster of flowers arranged on a branching stem) is an ascending or spreading cyme (usually flat-topped or convex flower cluster in which the main axis and each branch end in a flower that opens before the flowers below or to the side of it), with yellow petals that are broadly obovate (egg-shaped), 9–17 mm (0.35–0.67 in) long, and quickly deciduous. The fruit is straw-colored, ovoid, 4.1–4.6 mm (0.16–0.18 in) long, 3.4–3.7 mm (0.13–0.15 in) in diameter, and dehisces (opens spontaneously at defined places) into five two-seeded segments; seeds are narrowly ovoid-elliptic, 2.3–2.8 mm (0.09–0.11 in) long, 1.0–1.3 mm (0.04–0.05 in) wide. In habit and flower, the plant closely resembles *Piriqueta cistoides* ssp. *caroliniana* (pitted stripe seed) in the family Turneraceae (Bradley and Gann 1999, p. 70).

Summary of Factors Affecting the Species

Section 4 of the Act (16 U.S.C. 1533), and its implementing regulations at 50 CFR part 424, set forth the procedures for adding species to the Federal Lists of

Endangered and Threatened Wildlife and Plants. Under section 4(a)(1) of the Act, we may determine a species to be endangered or threatened due to one or more of the following five factors: (A) the present or threatened destruction, modification, or curtailment of its habitat or range; (B) overutilization for commercial, recreational, scientific, or educational purposes; (C) disease or predation; (D) the inadequacy of existing regulatory mechanisms; or (E) other natural or manmade factors affecting its continued existence. Listing actions may be warranted based on any of the above threat factors, singly or in combination. Each of these factors as applied to these two plants is discussed below or in the proposed listing rule for *Brickellia mosieri* and *Linum carteri* var. *carteri* (78 FR 61273; October 3, 2013).

A. The Present or Threatened Destruction, Modification, or Curtailment of Its Habitat or Range

Brickellia mosieri and *Linum carteri* var. *carteri* have experienced substantial destruction, modification, and curtailment of their habitat and range (see **Status Assessment**, in the proposed listing rule for *B. mosieri* and *L. c.* var. *carteri* (78 FR 61273; October 3, 2013) and revised information above). Specific threats to these plants included in this factor include habitat loss, fragmentation, and modification caused by development (i.e., conversion to both urban and agricultural land uses) and inadequate fire management. Human population growth and development and habitat fragmentation and their specific effects on these plants are discussed in the proposed listing rule for *B. mosieri* and *L. c.* var. *carteri* (78 FR 61273; October 3, 2013), while fire management is

summarized below.

Fire Management

One of the primary threats to both of these plants is habitat modification and degradation through inadequate fire management, which includes both the lack of prescribed fire and suppression of natural fires. Where the term “fire-suppressed” is used below and in the proposed rule, it describes degraded pine rockland conditions resulting from a lack of adequate fire (natural or prescribed) in the landscape. The effects of fire suppression on pine rocklands, and fire-adapted species such as *Brickellia mosieri* and *Linum carteri* var. *carteri*, are discussed in detail in the proposed listing rule for *B. mosieri* and *L. c.* var. *carteri* (78 FR 61273; October 3, 2013).

Brickellia mosieri—All occurrences of *Brickellia mosieri* are affected by some degree of inadequate fire management, with the primary threat being shading by hardwoods (Bradley and Gann 1999, p. 15; Bradley and Gann 2005, page numbers not applicable). While management of some County conservation lands (e.g., those in Richmond Pinelands complex and Navy Wells Pineland Preserve) includes regular burning, other such lands can be severely fire-suppressed. Even in areas under active management, some portions are typically fire-suppressed, thereby threatening populations of this species.

Linum carteri var. *carteri*—The status of *Linum carteri* var. *carteri* populations in

relation to fire suppression are described in the proposed listing rule for *Brickellia mosieri* and *L. c. var. carteri* (78 FR 61273; October 3, 2013).

Implementation of a prescribed fire program in Miami-Dade County has been hampered by a shortage of resources, and by logistical difficulties and public concern related to burning next to residential areas. Many homes have been built in a mosaic of pine rockland, so the use of prescribed fire in many places has become complicated because of potential danger to structures and smoke generated from the burns. Nonprofit organizations, such as the Institute for Regional Conservation (IRC) have similar difficulties in conducting prescribed burns due to difficulties with permitting and obtaining the necessary permissions as well as hazard insurance limitations (Gann 2013a, pers. comm.). Few private landowners have the means and/or desire to implement prescribed fire on their property, and doing so in a fragmented urban environment is logistically difficult and may be costly. One of the few privately owned pine rocklands that is successfully managed with prescribed burning is Pine Ridge Sanctuary, located in a more agricultural (less urban) matrix in the southwestern portion of *Brickellia mosieri*'s current range; it was last burned in November 2010 (Glancy 2013, pers. comm.).

Conservation Efforts To Reduce the Present or Threatened Destruction, Modification, or Curtailment of Habitat or Range

These are discussed in detail in the proposed listing rule for *Brickellia mosieri* and *Linum carteri* var. *carteri* (78 FR 61273; October 3, 2013).

B. Overutilization for Commercial, Recreational, Scientific, or Educational Purposes

Factor B is discussed in detail in the proposed listing rule for *Brickellia mosieri* and *Linum carteri* var. *carteri* (78 FR 61273; October 3, 2013).

C. Disease or Predation

No diseases or incidences of predation have been reported for *Brickellia mosieri* and *Linum carteri* var. *carteri*.

D. The Inadequacy of Existing Regulatory Mechanisms

State and local regulations, and fee title properties, are discussed in detail in the proposed listing rule for *Brickellia mosieri* and *Linum carteri* var. *carteri* (78 FR 61273; October 3, 2013), while Federal regulations are discussed below.

Federal

If these plants were not listed, they would have no Federal regulatory protection in their known occupied and suitable habitat. Neither taxon occurs on National Wildlife Refuge or National Park land. *Brickellia mosieri* is known to occur within habitat patches (where patch boundaries are based on contiguous pine rockland habitat,

irrespective of land ownership) that include Federal lands within the Richmond Pinelands Complex, including lands owned by the USCG and NOAA. The only known Federal occurrence of *Linum carteri* var. *carteri* is on the U.S. Department of Agriculture's Subtropical Horticultural Research Station (Chapman Field). There are no Federal protections for candidate species on these properties. These plants primarily occur on State- or County-owned and private land (Tables 1 and 2 of the proposed rule), and development of these areas would likely require no Federal permit or other authorization. Therefore, projects that affect them would usually not be analyzed under the National Environmental Policy Act (NEPA) ([42 U.S.C. 4321](#) *et seq.*).

E. Other Natural or Manmade Factors Affecting Its Continued Existence

Brickellia mosieri and *Linum carteri* var. *carteri* are both threatened by other natural or manmade factors that affect each taxon to varying degrees. Specific threats to these plants included in this factor consist of the spread of nonnative invasive plants, potentially incompatible management practices (such as mowing and herbicide use), direct impacts to plants from recreation and other human activities, small population size and isolation, climate change, and the related risks from environmental stochasticity (extreme weather) on these small populations. With the exception of nonnative plants and recreation, which are discussed below, the rest of these threats and their specific effect on these plants are discussed in detail in the proposed listing rule for *B. mosieri* and *L. c.* var. *carteri* (78 FR 61273; October 3, 2013).

Nonnative Plant Species

Nonnative plants have significantly affected pine rocklands, and threaten all occurrences of *Brickellia mosieri* and *Linum carteri* var. *carteri* to some degree (Bradley and Gann 1999, pp. 15, 72; Bradley and Gann 2005, page numbers not applicable; Bradley 2007, pers. comm.; Bradley and van der Heiden 2013, pp. 12–16). As a result of human activities, at least 277 taxa of nonnative plants have invaded pine rocklands throughout south Florida (Service 1999, p. 3-175). *Neyraudia reynaudiana* (Burma reed) and *Schinus terebinthifolius* (Brazilian pepper) threaten both plants (Bradley and Gann 1999, pp. 13, 72). *S. terebinthifolius*, a nonnative tree, is the most widespread and one of the most invasive species. It forms dense thickets of tangled, woody stems that completely shade out and displace native vegetation (Loflin 1991, p. 19; Langeland and Craddock Burks 1998, p. 54). *Acacia auriculiformis* (earleaf acacia), *Melinis repens* (natal grass), *Lantana camara* (shrub verbena), and *Albizia lebbbeck* (tongue tree) are some of the other nonnative species in pine rocklands.

Nonnative invasive plants compete with native plants for space, light, water, and nutrients, and make habitat conditions unsuitable for both *Brickellia mosieri* and *Linum carteri* var. *carteri*, which respond positively to open conditions. They also affect the characteristics of a fire when it does occur. Historically, pine rocklands had an open, low understory where natural fires remained patchy with low temperature intensity, thus sparing many native plants such as *B. mosieri* and *L. c.* var. *carteri*. Dense infestations of *Neyraudia reynaudiana* and *Schinus terebinthifolius* cause higher fire temperatures and

longer burning periods. With the presence of invasive nonnative species, it is uncertain how fire, even under a managed situation, will affect these plants. Bradley and Gann (1999, pp. 13, 71–72) indicated that the control of nonnative plants is one of the most important conservation actions for these plants and a critical part of habitat maintenance.

Management of nonnative invasive plants in pine rocklands in Miami-Dade County is further complicated because the vast majority of pine rocklands are small, fragmented areas bordered by urban development. Areas near managed pine rockland that contain nonnative species can act as a seed source of nonnatives allowing them to continue to invade the surrounding pine rockland (Bradley and Gann 1999, p. 13).

Recreation and Other Human Activities

Linum carteri var. *carteri*'s occurrence in disturbed, open areas such as firebreaks and road rights-of-way also makes it much more susceptible than *Brickellia mosieri* to recreational and other human activities. These activities may inadvertently impact some populations of *L. c.* var. *carteri*. In the past, mountain biking has been identified as a threat at R. Hardy Matheson Preserve (Bradley and Gann 1999, pp. 71, 74; Bradley 2007, pers. comm.). This threat was mitigated by the placement of protective fencing, however, since mountain bikers have been fenced out, habitat succession has increased and resulted in less suitable conditions for *L. c.* var. *carteri* (Possley 2013, pers. comm.). More recently, a colony of *L. c.* var. *carteri* at Camp Owaissa Bauer Addition has been impacted by “yard sales” and car parking along Krome Avenue (Bradley and van der

Heiden 2013, p. 13). While these impacts are usually some distance from the plants, they sometimes encroach on the edge of the natural area and have the potential to trample the plants. This plant occurs in similar habitat on Rockdale Pineland, where it is found along the edges of the abandoned Florida East Coast Railway tracks, adjacent to pine rockland habitat (Bradley and van der Heiden 2013, p. 16). Here, plants have also been trampled from parking vehicles and machinery along the edges of the railroad right-of-way (Bradley and van der Heiden 2013, p. 16). While these activities have affected individual plants in some populations, they are not likely to have caused significant population declines in the taxon.

Conservation Efforts To Reduce Other Natural or Manmade Factors Affecting Continued Existence

An IRC program included reintroduction of both *Brickellia mosieri* and *Linum carteri* var. *carteri* in an effort to establish new occurrences of these plants and increase population sizes. To date, *B. mosieri* has been reintroduced to at least one private site, although the status of these plants is currently unknown (Gann 2013b, pers. comm.).

Ex-situ conservation by Fairchild Tropical Botanic Garden consists of seed collection of pine rockland plants, including *Brickellia mosieri* and *Linum carteri* var. *carteri*, to learn about their germination, storage, and cultivation requirements to help safeguard these plants from extinction. This program is discussed in detail in the proposed listing rule for *Brickellia mosieri* and *Linum carteri* var. *carteri* (78 FR 61273;

October 3, 2013).

Summary of Biological Status and Threats

Only small and fragmented occurrences of these two plants remain. The current ranges of *Brickellia mosieri* and *Linum carteri* var. *carteri* span such a small geographic area—a narrow band no more than 4.0 km (2.5 mi) in width, and approximately 30.1 km (18.7 mi) and 26.9 km (16.7 mi) in length, respectively, along the Miami Rock Ridge—that all populations could be affected by a single event (*e.g.*, hurricane). Four of the seven remaining populations of *L. c.* var. *carteri* have fewer than 20 individual plants. *B. mosieri* populations occur in higher numbers, but are still not considered sizable. *L. c.* var. *carteri* shows great differences in plant numbers from year to year, probably because individuals typically live 1–2 years and grow from seed. This trait makes them more vulnerable than perennials to changes in environment. Viable plant populations for small, short-lived herbs may consist of tens of thousands of plants (Menges 1991, p. 48; Lande 1995, p. 789). Although robust population viability analyses (including minimum viable population calculations) have not been conducted for these plants, indications are that most existing populations for both plants are at best marginal.

We have determined that the threats to both *Brickellia mosieri* and *Linum carteri* var. *carteri* consist primarily of habitat loss and modification through urban and agricultural development, lack of adequate fire management, proliferation of nonnative invasive plants, and sea level rise. Threats described under Factor A—habitat loss,

fragmentation, and degradation resulting from development and inadequate fire management, and Factor E—competition from nonnative invasive plants, are believed to be the primary drivers in the historical and recent declines of *B. mosieri* and *L. c. var. carteri*. *L. c. var. carteri* has also been threatened by anthropogenic disturbances which threaten populations in disturbed habitats, such as firebreaks and road rights-of-way, and both plants are suspected to be negatively affected by threats related to small, isolated populations (Factor E). All of these threats are ongoing and expected to continue to impact populations of these plants in the future. Current local, State, and Federal regulatory mechanisms (Factor D) are inadequate to protect these plants from taking and habitat loss. Despite these existing regulatory mechanisms, *B. mosieri* and *L. c. var. carteri* continue to decline.

Other factors that are likely to threaten *Brickellia mosieri* and *Linum carteri* var. *carteri* in the future include climate change (including sea level rise) and extreme weather events (hurricanes, frost events). Effects of these could be catastrophic on isolated, small populations of both plants (Factor E). The narrow distribution of their populations makes them more susceptible to extirpation from a single catastrophic event. This level of isolation makes natural recolonization of extirpated populations virtually impossible without human intervention.

Determination

We have carefully assessed the best scientific and commercial information available regarding the past, present, and future threats to *Brickellia mosieri* and *Linum carteri* var. *carteri*. As described in detail above and in the proposed listing rule (78 FR 61273; October 3, 2013), both plants are currently at risk throughout all of their respective ranges due to the immediacy and severity of threats from habitat destruction and modification (Factor A) and other natural or manmade factors affecting their continued existence (Factor E), and existing regulatory mechanisms are inadequate to reduce these threats (Factor D). Although actions are ongoing to alleviate some threats, no populations appear to be free of major threats. As a result, impacts from increasing threats, singly or in combination, are likely to result in the extinction of these plants.

Brickellia mosieri

Numerous threats are occurring now and are likely to continue in the foreseeable future, at a high intensity, and across the entire range of *Brickellia mosieri*; therefore, we have determined the species is in danger of extinction throughout its range. The threats are currently active, and will continue to affect the populations of *B. mosieri* into the foreseeable future, and these threats will individually and collectively contribute to the species' local extirpation and potential extinction. Because these threats are placing the species in danger of extinction now and not only at some point in the foreseeable future, we find that this species meets the definition of an endangered species, rather than a threatened species. Therefore, we have determined that *B. mosieri* meets the definition of endangered in accordance with sections 3(6) and 4(a)(1) of the Act.

Linum carteri var. *carteri*

Numerous threats are occurring now and are likely to continue in the foreseeable future, at a high intensity, and across the entire range of *Linum carteri* var. *carteri*; therefore, we have determined the taxon is in danger of extinction throughout its range. The threats are currently active, and will continue to affect the populations of *L. c.* var. *carteri* into the foreseeable future, and these threats will individually and collectively contribute to the plant's local extirpation and potential extinction. Because these threats are placing the taxon in danger of extinction now and not only at some point in the foreseeable future, we find this taxon meets the definition of an endangered species rather than a threatened species. Therefore, we have determined that *L. c.* var. *carteri* meets the definition of endangered in accordance with sections 3(6) and 4(a)(1) of the Act.

The Act defines an endangered species as any species that is "in danger of extinction throughout all or a significant portion of its range" and a threatened species as any species "that is likely to become endangered throughout all or a significant portion of its range within the foreseeable future." We find that threatened species status is not appropriate for these plants because of contracted range, because the threats are occurring rangewide and are not localized, and because the threats are ongoing and expected to continue into the future.

Under the Act and our implementing regulations, a species may warrant listing if it is endangered or threatened throughout all or a significant portion of its range. The threats to the survival of these plants occur throughout the plants' respective ranges and are not restricted to any particular significant portion of those ranges. Accordingly, our assessment and proposed determination applies to the plants throughout their entire ranges.

Available Conservation Measures

Conservation measures provided to species listed as endangered or threatened under the Act include recognition, recovery actions, requirements for Federal protection, and prohibitions against certain practices. Recognition through listing results in public awareness and conservation by Federal, State, Tribal, and local agencies, private organizations, and individuals. The Act encourages cooperation with the States and requires that recovery actions be carried out for all listed species. The protection required by Federal agencies and the prohibitions against certain activities are discussed, in part, below.

The primary purpose of the Act is the conservation of endangered and threatened species and the ecosystems upon which they depend. The ultimate goal of such conservation efforts is the recovery of these listed species, so that they no longer need the protective measures of the Act. Subsection 4(f) of the Act requires the Service to develop and implement recovery plans for the conservation of endangered and threatened species. The recovery planning process involves the identification of actions that are necessary to

halt or reverse the species' decline by addressing the threats to its survival and recovery. The goal of this process is to restore listed species to a point where they are secure, self-sustaining, and functioning components of their ecosystems.

Recovery planning includes the development of a recovery outline shortly after a species is listed and preparation of a draft and final recovery plan. The recovery outline guides the immediate implementation of urgent recovery actions and describes the process to be used to develop a recovery plan. Revisions of the plan may be done to address continuing or new threats to the species, as new substantive information becomes available. The recovery plan identifies site-specific management actions that set a trigger for review of the five factors that control whether a species remains endangered or may be downlisted or delisted, and methods for monitoring recovery progress. Recovery plans also establish a framework for agencies to coordinate their recovery efforts and provide estimates of the cost of implementing recovery tasks. Recovery teams (composed of species experts, Federal and State agencies, nongovernmental organizations, and stakeholders) are often established to develop recovery plans. When completed, the recovery outline, draft recovery plan, and the final recovery plan will be available on our website (<http://www.fws.gov/endangered>), or from our South Florida Ecological Services Field Office (see **FOR FURTHER INFORMATION CONTACT**).

Implementation of recovery actions generally requires the participation of a broad range of partners, including other Federal agencies, States, Tribes, nongovernmental organizations, businesses, and private landowners. Examples of recovery actions include

habitat restoration (e.g., restoration of native vegetation), research, captive propagation and reintroduction, and outreach and education. The recovery of many listed species cannot be accomplished solely on Federal lands because their range may occur primarily or solely on non-Federal lands. To achieve recovery of these species requires cooperative conservation efforts on private, State, and Tribal lands.

Following publication of this final listing rule, funding for recovery actions will be available from a variety of sources, including Federal budgets, State programs, and cost share grants for non-Federal landowners, the academic community, and nongovernmental organizations. In addition, pursuant to section 6 of the Act, the State of Florida would be eligible for Federal funds to implement management actions that promote the protection or recovery of *Brickellia mosieri* and *Linum carteri* var. *carteri*. Information on our grant programs that are available to aid species recovery can be found at: <http://www.fws.gov/grants>.

Please let us know if you are interested in participating in recovery efforts for *Brickellia mosieri* and *Linum carteri* var. *carteri*. Additionally, we invite you to submit any new information on these plants whenever it becomes available and any information you may have for recovery planning purposes (see **FOR FURTHER INFORMATION CONTACT**).

Section 7(a) of the Act requires Federal agencies to evaluate their actions with respect to any species that is proposed or listed as an endangered or threatened species

and with respect to its critical habitat, if any is designated. Regulations implementing this interagency cooperation provision of the Act are codified at 50 CFR part 402.

Section 7(a)(4) of the Act requires Federal agencies to confer with the Service on any action that is likely to jeopardize the continued existence of a species proposed for listing or result in destruction or adverse modification of proposed critical habitat. If a species is listed subsequently, section 7(a)(2) of the Act requires Federal agencies to ensure that activities they authorize, fund, or carry out are not likely to jeopardize the continued existence of the species or destroy or adversely modify its critical habitat. If a Federal action may affect a listed species or its critical habitat, the responsible Federal agency must enter into consultation with the Service.

Federal agency actions within the species' habitat that may require conference or consultation or both as described in the preceding paragraph include, but are not limited to, management and any other landscape-altering activities on Federal lands administered by the Department of Defense, Homeland Security/U.S. Coast Guard, U.S. Prisons Bureau, National Oceanic and Atmospheric Administration, National Park Service, U.S. Fish and Wildlife Service, and U.S. Department of Agriculture; the issuance of Federal permits under section 404 of the Clean Water Act (33 U.S.C. 1251 *et seq.*) by the U.S. Army Corps of Engineers; construction and management of gas pipeline and power line rights-of-way by the Federal Energy Regulatory Commission; construction and maintenance of roads or highways by the Federal Highway Administration; and implementation of the National Flood Insurance Program and disaster relief efforts conducted by the Federal Emergency Management Agency.

The Act and its implementing regulations set forth a series of general prohibitions and exceptions that apply to endangered plants. All prohibitions of section 9(a)(2) of the Act, implemented by 50 CFR 17.61, apply. These prohibitions, in part, make it illegal for any person subject to the jurisdiction of the United States to import or export, transport in interstate or foreign commerce in the course of a commercial activity, sell or offer for sale in interstate or foreign commerce, or remove and reduce the species to possession from areas under Federal jurisdiction. In addition, for plants listed as an endangered species, the Act prohibits the malicious damage or destruction on areas under Federal jurisdiction and the removal, cutting, digging up, or damaging or destroying of such plants in knowing violation of any State law or regulation, including State criminal trespass law. Exceptions to these prohibitions are outlined in 50 CFR 17.62.

Preservation of native flora of Florida (Florida Statutes 581.185) sections (3)(a) and (b) provide limited protection to species listed in the State of Florida Regulated Plant Index including *Brickellia mosieri* and *Linum carteri* var. *carteri*, as described under Factor D, *The Inadequacy of Existing Regulatory Mechanisms*. Federal listing increases protection for these plants by making violations of section 3 of the Florida Statute punishable as a Federal offense under section 9 of the Act. This statutory relationship provides increased protection from unauthorized collecting and vandalism for the plants on State and private lands, where they might not otherwise be protected by the Act, and increases the severity of the penalty for unauthorized collection, vandalism, or trade in these plants.

We may issue permits to carry out otherwise prohibited activities involving endangered and threatened plant species under certain circumstances. Regulations governing permits are codified at 50 CFR 17.62 for endangered plants, and at 50 CFR 17.72 for threatened plants. With regard to endangered plants, a permit must be issued for activities undertaken for scientific purposes or to enhance the propagation or survival of the species.

It is our policy, as published in the **Federal Register** on July 1, 1994 (59 FR 34272), to identify to the maximum extent practicable at the time a species is listed, those activities that would or would not constitute a violation of section 9 of the Act. The intent of this policy is to increase public awareness of the effect of a listing on proposed and ongoing activities within the range of listed species. The following activities could potentially result in a violation of section 9 of the Act; this list is not comprehensive:

(1) Import *Brickellia mosieri* or *Linum carteri* var. *carteri* into, or export these plants from, the United States.

(2) Remove and reduce to possession *Brickellia mosieri* or *Linum carteri* var. *carteri* from areas under Federal jurisdiction; maliciously damage or destroy these plants on any such area; or remove, cut, dig up, or damage or destroy these plants on any other area in knowing violation of any law or regulation of any State or in the course of any violation of a State criminal trespass law.

(3) Deliver, receive, carry, transport, or ship in interstate or foreign commerce, by any means whatsoever and in the course of a commercial activity, *Brickellia mosieri* or *Linum carteri* var. *carteri*.

(4) Sell or offer for sale in interstate or foreign commerce *Brickellia mosieri* or *Linum carteri* var. *carteri*.

(5) Introduce any nonnative wildlife or plant species to the State of Florida that compete with or prey upon *Brickellia mosieri* or *Linum carteri* var. *carteri*.

(6) Release any unauthorized biological control agents that attack any life stage of *Brickellia mosieri* or *Linum carteri* var. *carteri*.

(7) Manipulate or modify the habitat of *Brickellia mosieri* or *Linum carteri* var. *carteri* on Federal lands without authorization.

Questions regarding whether specific activities would constitute a violation of section 9 of the Act should be directed to the South Florida Ecological Services Field Office (see **FOR FURTHER INFORMATION CONTACT**).

Required Determinations

National Environmental Policy Act (42 U.S.C. 4321 et seq.)

We have determined that environmental assessments and environmental impact statements, as defined under the authority of the National Environmental Policy Act need not be prepared in connection with listing a species as an endangered or threatened species under the Endangered Species Act. We published a notice outlining our reasons for this determination in the **Federal Register** on October 25, 1983 (48 FR 49244).

Government-to-Government Relationship with Tribes

In accordance with the President's memorandum of April 29, 1994 (Government-to-Government Relations with Native American Tribal Governments; 59 FR 22951), Executive Order 13175 (Consultation and Coordination With Indian Tribal Governments), and the Department of the Interior's manual at 512 DM 2, we readily acknowledge our responsibility to communicate meaningfully with recognized Federal Tribes on a government-to-government basis. In accordance with Secretarial Order 3206 of June 5, 1997 (American Indian Tribal Rights, Federal-Tribal Trust Responsibilities, and the Endangered Species Act), we readily acknowledge our responsibilities to work directly with tribes in developing programs for healthy ecosystems, to acknowledge that tribal lands are not subject to the same controls as Federal public lands, to remain sensitive to Indian culture, and to make information available to tribes. No tribal lands are impacted by this listing.

References Cited

A complete list of references cited in this rulemaking is available on the Internet at *<http://www.regulations.gov>* and upon request from the South Florida Ecological Services Field Office (see **FOR FURTHER INFORMATION CONTACT**).

Authors

The primary authors of this final rule are the staff members of the South Florida Ecological Services Field Office.

List of Subjects in 50 CFR Part 17

Endangered and threatened species, Exports, Imports, Reporting and recordkeeping requirements, Transportation.

Regulation Promulgation

Accordingly, we amend part 17, subchapter B of chapter I, title 50 of the Code of Federal Regulations, as follows:

PART 17—[AMENDED]

1. The authority citation for part 17 continues to read as follows:

Authority: 16 U.S.C. 1361–1407; 1531–1544; and 4201–4245; unless otherwise noted.

2. Amend § 17.12(h) by adding entries for “*Brickellia mosieri*” and “*Linum carteri* var. *carteri*”, in alphabetical order under Flowering Plants, to the List of Endangered and Threatened Plants, to read as follows:

§ 17.12 Endangered and threatened plants.

* * * * *

(h) * * *

Species		Historical	Family	Status	When	Critical	Special
		range			listed	habitat	rules
Scientific Name	Common name						
Flowering Plants							
* * * * *							
<i>Brickellia mosieri</i>	Brickell-bush, Florida	U.S.A. (FL)	Asteraceae	E	844	NA	NA
* * * * *							
<i>Linum carteri</i> var. <i>carteri</i>	Flax, Carter's small-flowered	U.S.A. (FL)	Linaceae	E	844	NA	NA
* * * * *							

* * * * *

Dated: August 8, 2014

David Cottingham

Acting Director, U.S. Fish and Wildlife Service

Billing Code 4310-55

[FR Doc. 2014-21110 Filed 09/03/2014 at 8:45 am; Publication Date: 09/04/2014]